EPA’s National Lakes Assessment 2012 Report Released

On December 8, 2016, EPA announced the release of the National Lakes Assessment (NLA) 2012 Report. This report is the culmination of a significant partnership between EPA, states, tribes, and other partners. In addition to the report, assessment of conditions at regional scales, differences between natural lakes and reservoirs, and an opportunity to explore population-level results in an interactive dashboard are also available. A few key findings from the report include the following:

- The NLA indicates that nutrient pollution is common in U.S. lakes; 40% of lakes have excessive levels of total phosphorus and 35% have excessive levels of total nitrogen. Nutrient pollution is the most widespread stressor among those measured in the NLA and can contribute to algae blooms and affect public health and recreational opportunities in lakes.

- In comparison with the 2007 report, a measure of the density of cells that could produce cyanotoxins, shows a statistically significant increase (+8.3%) in the percentage of lakes in the most disturbed category. The NLA identified a significant increase in the detection of microcystin among lakes in 2012 (+9.5%). However, concentrations of this algal toxin remained low and rarely exceeded WHO recreational levels of concern (<1% of the population) in both assessments.

EPA and its partners are preparing to sample another 1,000 lakes in 2017, for the third NLA. If you have any questions, please contact Amina Pollard, lead for the NLA at pollard.amina@epa.gov

On December 9th, EPA released a pre-publication version of the final fourth Unregulated Contaminant Monitoring Rule (UCMR 4) pursuant to the Safe Drinking Water Act. The final rule identifies 30 contaminants that will be monitored by public water systems between 2018 and 2020, and specifies the analytical methods that must be used to measure these contaminants. Of the 30 contaminants, ten are cyanotoxins: microcystins (-LA, -LF, -LR, -LY, -RR, -YR, and total MCs), nodularin, anatoxin-a, and cylindrospermopsin. EPA will consider the occurrence data from UCMR 4 and other sources, along with peer-reviewed health effects assessments, to support a regulatory determination on whether to initiate the process to develop a national primary drinking water regulation. EPA published the final rule in the Federal Register here.

On December 12th, EPA published the Draft Human Health Recreational Ambient Water Quality Criteria and/or Swimming Advisories for Microcystins and Cylindrospermopsin to protect the public from incidental ingestion of cyanotoxins during primary contact recreation. EPA is accepting comments on the draft criteria document for 60 days. For more information, please visit the Microbial (Pathogen)/Recreational Water Quality Criteria page.

This newsletter was created by Dr. Lesley V. D’Anglada, Office of Water, Office of Science and Technology, United States Environmental Protection Agency. To sign up for the newsletter please send an email to danglada.lesley@epa.gov. For more information, visit EPA’s CyanoHABs website at www.epa.gov/cyanohabs
HABs, BEACH CLOSURES and HEALTH ADVISORIES, DECEMBER 2016

SUMMARY OF HABs-RELATED ADVISORIES POSTED IN 2016*

* Postings include blooms, cautions, warnings, public health advisories, and public health warnings, due to the presence of algae, toxins or both. This is NOT a comprehensive list, and many blooms may have not been reported. Thanks to Johnwilliam Carroll (Pathways Internship Program) USEPA, for helping compiling this list.

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**High-resolution mapping of global surface water and its long-term changes**

**Spatially-explicit forecasting of cyanobacteria assemblages in freshwater lakes by multi-objective hybrid evolutionary algorithms**

**Growth, physiochemical and antioxidant responses of overwintering benthic cyanobacteria to hydrogen peroxide**

**A review of monitoring technologies for real-time management of cyanobacteria: Recent advances and future direction**

**Population persistence in flowing-water habitats: Conditions where flow-based management of harmful algal blooms works, and where it does not**

Useful Resources
✓ [EPA Cyanotoxins in Drinking Water Page](#)
✓ [EPA Funding Opportunities Page](#)
✓ [EPA Water Research Page](#)
✓ [Great Lakes HABs Collaboratory Events](#)

Toxins Journal Special Collection on HABs
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